



Practitioner's Docket No. 55,045 (158)

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**Box Patent Application Assistant Commissioner for Patents** Washington, D.C. 20231

### NEW APPLICATION TRANSMITTAL

Transmitted herewith for filing is the patent application of

Inventor(s): Brian James Martin and Michael Ryan

**WARNING:** 

37 C.F.R. § 1.41(a)(1) points out:

"(a) A patent is applied for in the name or names of the actual inventor or inventors.

(1) The inventorship of a nonprovisional application is that inventorship set forth in the oath or declaration as prescribed by § 1.63, except as provided for in § 1.53(d)(4) and § 1.63(d). If an oath or declaration as prescribed by § 1.63 is not filed during the pendency of a nonprovisional application, the inventorship is that inventorship set forth in the application papers filed pursuant to § 1.53(b), unless a petition under this paragraph accompanied by the fee set forth in  $\S$  1.17(i) is filed supplying or changing the name or names of the inventor or inventors."

For (title): METHOD OF REDUCING CONTENTION OF A HIGHLY CONTENDED LOCK PROTECTING MULTIPLE DATA ITEMS

#### 1. Type of Application

This new application is for a(n)

### **CERTIFICATION UNDER 37 C.F.R. 1.10\***

(Express Mail label number is mandatory.) (Express Mail certification is optional.)

I hereby certify that this correspondence and the documents referred to as attached therein are being deposited with the United States Postal Service on this date, September 29, 2000, in an envelope as "Express Mail Post Office to Addressee," mailing Label Number EL180585765US, addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231.

(type or print name of person mailing paper)

Signature of person mailing paper

**WARNING:** 

Certificate of mailing (first class) or facsimile transmission procedures of 37 C.F.R. 1.8 cannot be used to

obtain a date of mailing or transmission for this correspondence.

\*WARNING:

Each paper or fee filed by "Express Mail" must have the number of the "Express Mail" mailing label

placed thereon prior to mailing. 37 C.F.R. 1.10(b).

"Since the filing of correspondence under  $\S$  1.10 without the Express Mail mailing label thereon is an oversight that can be avoided by the exercise of reasonable care, requests for waiver of this requirement will not be granted on petition." Notice of Oct. 24, 1996, 60 Fed. Reg. 56,439, at 56,442.

## (check one applicable item below)

	[X]	Original (nonprovisional)
	[]	Design
	[ ]	Plant
WARNIN	_	<b>Do not</b> use this transmittal for a completion in the U.S. of an International Application under 35 U.S.C., unless the International Application is being filed as a divisional, continuation or continuation-in-part on.
WARNIN	VG:	Do not use this transmittal for the filing of a provisional application.
	TRANSM	the following 3 items apply, then complete and attach ADDED PAGES FOR NEW APPLICATION ITTAL WHERE BENEFIT OF A PRIOR U.S. APPLICATION CLAIMED and a NOTIFICATION IN PARENT ITION OF THE FILING OF THIS CONTINUATION APPLICATION.
	[]	Divisional.
	[ ]	Continuation.
	[ ]	Continuation-in-part (C-I-P).
_		

## 2. Benefit of Prior U.S. Application(s) (35 U.S.C. 119(e), 120, or 121)

NOTE: A nonprovisional application may claim an invention disclosed in one or more prior filed copending nonprovisional applications or copending international applications designating the United States of America. In order for a nonprovisional application to claim the benefit of a prior filed copending nonprovisional application or copending international application designating the United States of America, each prior application must name as an inventor at least one inventor named in the later filed nonprovisional application and disclose the named inventor's invention claimed in at least one claim of the later filed nonprovisional application in the manner provided by the first paragraph of 35 U.S.C. 112. Each prior application must also be:

- (i) An international application entitled to a filing date in accordance with PCT Article 11 and designating the United States of America; or
- (ii) Complete as set forth in § 1.51(b); or
- (iii) Entitled to a filing date as set forth in § 1.53(b) or § 1.53(d) and include the basic filing fee set forth in § 1.16; or
- (iv) Entitled to a filing date as set forth in  $\S$  1.53(b) and have paid therein the processing and retention fee set forth in  $\S$  1.21(l) within the time period set forth in  $\S$  1.53(f).

37 C.F.R. § 1.78(a)(1).

NOTE If the new application being transmitted is a divisional, continuation or a continuation-in-part of a parent case, or where the parent case is an International Application which designated the U.S., or benefit of a prior provisional application is claimed, then check the following item and complete and attach ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED.

WARNING: If an application claims the benefit of the filing date of an earlier filed application under 35 U.S.C. 120, 121 or 365(c), the 20-year term of that application will be based upon the filing date of the earliest U.S. application that the application makes reference to under 35 U.S.C. 120, 121 or 365(c). (35 U.S.C. 154(a)(2) does not take into account, for the determination of the patent term, any application on which priority is claimed under 35 U.S.C. 119, 365(a) or 365(b).) For a c-i-p application, applicant should review whether any claim in the patent that will issue is supported by an earlier application and, if not, the applicant should consider canceling the reference to the earlier filed application. The term of a patent is not based on a claim-by-claim approach. See Notice of April 14, 1995, 60

[ ]

[ ] [X]

B.

Formal Informal

\_\_\_\_Other

Other Papers Enclosed

1 Pages of Abstract

Fed. Reg. 20,195, at 20,205.

WARNIN	within the	When the last day of pendency of a provisional application falls on a Saturday, Sunday, or Federal holiday District of Columbia, any nonprovisional application claiming benefit of the provisional application must rior to the Saturday, Sunday, or Federal holiday within the District of Columbia. See 37 C.F.R. § 1.78(a)(3).
	[]	The new application being transmitted claims the benefit of prior U.S. application(s).
3.	Papers	Enclosed
	<b>A.</b>	Required for Filing Date under 37 C.F.R. § 1.53(b) (Regular) or 37 C.F.R. § 1.153 (Design) Application
		21 Pages of Specification
		9 Pages of Claims
		7 Sheets of Drawing (informal)
	patent ap paper and to the orig	DO NOT submit original drawings. A high quality copy of the drawings should be supplied when filing a polication. The drawings that are submitted to the Office must be on strong, white, smooth, and non-shiny I meet the standards according to § 1.84. If corrections to the drawings are necessary, they should be made ginal drawing and a high-quality copy of the corrected original drawing then submitted to the Office. Only is required or desired. For comments on proposed then-new 37 C.F.R. 1.84, see Notice of March 9, 1988. 5.57-62).
	docket nu drawings	ng indicia, if provided, should include the application number or the title of the invention, inventor's name, mber (if any), and the name and telephone number of a person to call if the Office is unable to match the to the proper application. This information should be placed on the back of each sheet of drawing a distance of 1.5 cm. (5/8 inch) down from the top of the page " 37 C.F.R. § 1.84(c)).
		(complete the following, if applicable)

The enclosed drawing(s) are photograph(s), and there is also attached a "PETITION TO ACCEPT PHOTOGRAPH(S) AS DRAWING(S)." 37 C.F.R. § 1.84(b).

4.	Additional Papers Enclosed						
	[]	Amendment to claims					
		Cancel in this applications claimsbefore calculating the filing fee. (At least one original independent claim must be retained for filing purposes.)  Add the claims shown on the attached amendment. (Claims added have been numbered consecutively following the highest numbered original claims.)					
		Preliminary Amendment Information Disclosure Statement (37 C.F.R. § 1.98) Form PTO-1449 (PTO/SB/08A and 08B) Citations Declaration of Biological Deposit Submission of "Sequence Listing," computer readable copy and/or amendment pertaining thereto for biotechnology invention containing nucleotide and/or amino acid sequence. Authorization of Attorney(s) to Accept and Follow Instructions from Representative Special Comments Other					
5.	Declara	tion or Oath (including power of attorney)					
NOTE:	nonprovisi the invento executed d is submitte inventors o that declar under § 1.	secuted declaration is not required in a continuation or divisional application provided the prior fional application contained a declaration as required, the application being filed is by all or fewer than all fors named in the prior application, there is no new matter in the application being filed, and a copy of the declaration filed in the prior application (showing the signature or an indication thereon that it was signed) and. The copy must be accompanied by a statement requesting deletion of the names of person(s) who are not of the application being filed. If the declaration in the prior application was filed under § 1.47 then a copy of the application being filed accompanied by a copy of the decision granting § 1.47 status or, if a nonsigning person 47 has subsequently joined in a prior application, then a copy of the subsequently executed declaration must be 37 C.F.R. § 1.63(d)(1)-(3).					
NOTE:	identify ea together w	ion filed to complete an application must be executed, identify the specification to which it is directed, ch inventor by full name, including the family name, and at least one given name without abbreviation ith any other given name or initial, and the residence, post office address and country of citizenship of each and state whether the inventor is a sole or joint inventor. 37 C.F.R. § 1.63(a)(1)-(4).					
	[X]	Enclosed (unexecuted).					
	]	Executed by					
		(check all applicable boxes)					
		<ul> <li>inventor(s).</li> <li>legal representative of inventor(s). 37 C.F.R. § 1.42 or 1.43.</li> <li>joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.</li> </ul>					

			[]	This is the petition required by 37 C.F.R. § 1.47 and the statement required by 37 C.F.R. § 1.47 is also attached. See item 13 below for fee.	
	[]	Not En	closed.		
NOTE:	applicati continua	ion contain tion or co	ns subject i ntinuation	ion in the U.S. of an International Application, or where the completion of the U.S. matter in addition to the International Application, the application may be treated as a in-part, as the case may be, utilizing ADDED PAGE FOR NEW APPLICATION NEFIT OF PRIOR U.S. APPLICATION CLAIMED.	
		[]		ation is made by a person authorized under 37 C.F.R. 1.41(c) on behalf of above named inventor(s).	
	(The	declara	tion or o	ath, along with the surcharge required by 37 C.F.R. § 1.16(e), can be filed subsequently).	
			[]	Showing that the filing is authorized.  (not required unless called into question. 37 C.F.R. § 1.41(d))	
6.	Invent	orship S	statemen	at .	
WARNI	WARNING: If the named inventors are each not the inventors of all the claims an explanation, including the ownership of the various claims at the time the last claimed invention was made, should be submitted.				
The inv	entorsh	ip for all	the clain	ms in this application are:	
	[X]	The sar	ne.	or	
	[]		claimed is subm	n explanation, including the ownership of the various claims at the time invention was made, itted. submitted.	
7.	Langu	age			
NOTE:	translati	on of the n	on-English	gned oath or declaration may be filed in a language other than English. An English hall language application and the processing fee of \$130.00 required by 37 C.F.R. § with the application, or within such time as may be set by the Office. 37 C.F.R. §	
	[X] [ ]	English Non-Er			
•		[]		sched translation includes a statement that the translation is accurate. 37 § 1.52(d).	

8.	Assign	ment		
	[X]	An assignment of the, frame	e invention to EMC Corporation was record (copy enclosed).	ed on reel
		MENT) ACC	A separate [ ] "COVER SHEET FOR ASSIC	
		[X] will follow.	also attached.	
OTE:		signment is submitted with nment" Notice of May 4, 1	a new application, send two separate letters-one for 990 (1114 O.G. 77-78).	the application and one fo
VARNI			EMENT UNDER 37 C.F.R. § 3.73(b)" must be filed v Notice of April 30, 1993, 1150 O.G. 62-64.	when a continuation-in-par
<b>)</b> .	Certifie	ed Copy		
	Certifie	d copy(ies) of applica	ation(s)	
	Coun	itry	Appln. no.	Filed
	Coun	try	Appln. no.	Filed
from w	Coun		Appln. no.	Filed
from w	Coun  hich prio	ority is claimed is (are) attached.	Appln. no.	Filed
from w	Coun  chich prio  [ ]  [ ]	ority is claimed is (are) attached. will follow.		
from w	Coun  hich prio  [ ]  [ ]	ority is claimed is (are) attached. will follow.	, in prior application U.S.S.N.	
from w	Coun  Thich prio  [ ]  [ ]  [ ]	ority is claimed is (are) attached. will follow. were filed on filed on	, in prior application U.S.S.N.	, which was

# **10. Fee Calculation** (37 C.F.R. § 1.16)

A. [X] Regular application

		CLAIM	S AS FIL	ED		
Claims	Number Filed	Basic Fee Allowance	Numbe	er Extra	Rate	Basic Fee 37 C.F.R. § 1.16(a) \$690.00
Total Claims (37 C.F.R. §	29	- 20 =	9	x	\$ 18.00	
1.16(c))	29	- 20 -	9	X	J 10.00	
						\$162.00
Independent (37 C.F.R. § 1.16(b))	Claims 5	- 3 =	2	x	\$ 78.00	
1.10(0))						\$156.00
Multiple Dep Claim(s), if a (37 C.F.R. § 1.16(d))			0	+	\$260.00	
[]	Amendment cancel Amendment deleting Fee for extra claims	ng multiple-depe	ndencies	is enclose	d.	
NOTE: If the f expirat § 1.16	ees for extra claims are no ion of the time period set fo (d).	ot paid on filing they r response by the Pa	must be putent and Tr	oaid or the c cademark O <u>f</u>	claims cancelled i Fice in any notice	by amendment, prior to th of fee deficiency. 37 C.F.F
		Fi	ling Fee (	Calculatio	n \$_	1008.00
В.	[ ] Design app (\$310.00—37 C.F.	R. § 1.16(f))	ling Fee (	Calculatio	n \$_	
C.	[ ] Plant appli (\$480.00—37 C.F.	R. § 1.16(g))	ling Fee (	Calculatio	n \$_	

11.	Small	<b>Entity</b>	Statement(	S	)
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[ ] Statement(s) that this is a filing by a small entity under 37 C.F.R. §§ 1.9 and 1.27 will be submitted at a later date.

WARNING: "Status as a small entity must be specifically established in each application or patent in which the status is available and desired. Status as a small entity in one application or patent does not affect any other application or patent, including applications or patents which are directly or indirectly dependent upon the application or patent in which the status has been established. The refiling of an application under § 1.53 as a continuation, division, or continuation-in-part (including a continued prosecution application under § 1.53(d)), or the filing of a reissue application requires a new determination as to continued entitlement to small entity status for the continuing or reissue application. A nonprovisional application claiming benefit under 35 U.S.C. 119(e), 120, 121, or 365(c) of a prior application, or a reissue application may rely on a statement filed in the prior application or in the patent if the nonprovisional application or the reissue application includes a reference to the statement in the prior application or in the patent or includes a copy of the statement in the prior application or in the patent and status as a small entity is still proper and desired. The payment of the small entity basic statutory filing fee will be treated as such a reference for purposes of this section." 37 C.F.R. § 1.28(a)(2).

(complete the following, if applicable)

		, filed on	from	which	benefit	is	being
claimed for th	is applic	ation under:					
35 U.S.C. §	[]	119(e),					
	[]	120,					
	[]	121,					
	[]	365(c),					
and which sta	tus as a s	mall entity is still proper and desired	l <b>.</b>				
[ ] A cor	y of the	statement in the prior application is	include	d.			
Filing Fee Cal	culation	(50% of <b>A</b> , <b>B</b> or <b>C</b> above)	\$				

NOTE: Any excess of the full fee paid will be refunded if a small entity status is established refund request are filed within 2 months of the date of timely payment of a full fee. The two-month period is not extendable under § 1.136. 37 C.F.R. § 1.28(a).

## 12. Request for International-Type Search (37 C.F.R. § 1.104(d))

(complete, if applicable)

[ ] Please prepare an international-type search report for this application at the time when national examination on the merits takes place.

13.

ree r	аушен	Being Made at This Time	
[X]	Not E	Enclosed	
	[X]	No filing fee is to be paid at this time. (This and the surcharge required by 37 C.F.R. § 1.	16(e) can be paid subsequently.,
[]	Enclo	osed	
	[]	Filing fee	\$
	[]	Recording assignment (\$40.00; 37 C.F.R. § 1.21(h)) (See attached "COVER SHEET FOR ASSIGNMENT ACCOMPANYING NEW APPLICATION.")	\$
	[]	Petition fee for filing by other than all the inventors or person on behalf of the inventor where inventor refused to sign or cannot be reached (\$130.00; 37 C.F.R. §§ 1.47 and 1.17(i))	\$
	[]	For processing an application with a specification in a non-English language (\$130.00; 37 C.F.R. §§ 1.52(d) and 1.17(k))	\$
	[]	Processing and retention fee (\$130.00; 37 C.F.R. §§ 1.53(d) and 1.21(l))	\$
	[]	Fee for international-type search report (\$40.00: 37 C.F.R. § 1.21(e))	\$

NOTE: 37 C.F.R. § 1.21(1) establishes a fee for processing and retaining any application that is abandoned for failing to complete the application pursuant to 37 C.F.R. § 1.53(f) and this, as well as the changes to 37 C.F.R. § 1.53 and 1.78(a)(1), indicate that in order to obtain the benefit of a prior U.S. application, either the basic filing fee must be paid, or the processing and retention fee of § 1.21(1) must be paid, within I year from notification under § 53(f).

Total Fees Enclosed

\$		

14.	Metho	d of Payment of Fees
	[]	Check in the amount of \$
	[]	Charge Account No in the amount of \$ A duplicate of this transmittal is attached.
NOTE:	Fees sho	uld be itemized in such a manner that it is clear for which purpose the fees are paid. 37 C.F.R. § 1.22(b).
15.	Author	rization to Charge Additional Fees
WARN	NG:	If no fees are to be paid on filing, the following items should not be completed.
WARNI		Accurately count claims, especially multiple dependent claims, to avoid unexpected high charges, if extra claim are authorized.
	[]	The Commissioner is hereby authorized to charge the following additional fees by this paper and during the entire pendency of this application to Account No
		[ ] 37 C.F.R. § 1.16(a), (f) or (g) (filing fees)
		[ ] 37 C.F.R. § 1.16(b), (c) and (d) (presentation of extra claims)
NOTE:	paid or the notice of	additional fees for excess or multiple dependent claims not paid on filing or on later presentation must only be nese claims cancelled by amendment prior to the expiration of the time period set for response by the PTO in any fee deficiency (37 C.F.R. § 1.16(d)), it might be best not to authorize the PTO to charge additional claim fees, ssibly when dealing with amendments after final action.
		[ ] 37 C.F.R. § 1.16(e) (surcharge for filing the basic filing fee and/or declaration on a date later than the filing date of the application)
		[ ] 37 C.F.R. § 1.17(a)(1)-(5) (extension fees pursuant to § 1.136(a).
		[ ] 37 C.F.R. § 1.17 (application processing fees)
NOTE:	requiring	on request may be submitted in an application that is an authorization to treat any concurrent or future reply, a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for of time for the appropriate length of time. An authorization to charge all required fees, fees under \$ 1.17 or all

requiring a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. An authorization to charge all required fees, fees under § 1.17, or all required extension of time fees will be treated as a constructive petition for an extension of time in any concurrent or future reply requiring a petition for an extension of time under this paragraph for its timely submission. Submission of the fee set forth in § 1.17(a) will also be treated as a constructive petition for an extension of time in any concurrent reply requiring a petition for an extension of time under this paragraph for its timely submission." 37 C.F.R. § 1.136(a)(3).

[ ] 37 C.F.R. § 1.18 (issue fee at or before mailing of Notice of Allowance, pursuant to 37 C.F.R. § 1.311(b))

NOTE: Where an authorization to charge the issue fee to a deposit account has been filed before the mailing of a Notice of Allowance, the issue fee will be automatically charged to the deposit account at the time of mailing the notice of allowance. 37 C.F.R. § 1.311(b)).

NOTE: 37 C.F.R. § 1.28(b) requires "Notification of any change in status resulting in loss of entitlement to small entity status must be filed in the application . . . prior to paying, or at the time of paying, . . issue fee." From the wording of 37 C.F.R. § 1.28(b), (a) notification of change of status must be made even if the fee is paid as "other than a small entity" and (b) no notification is required if the change is to another small entity.

#### 16. **Instructions as to Overpayment**

NOTE:	" Amounts of twenty-five dollars or less will not be returned unless specifically requested within a reasonable time will the payer be notified of such amounts; amounts over twenty-five dollars may be returned by check or, if requeste credit to a deposit account." 37 C.F.R. § 1.26(a).					
	[]	Credit Account No				
	[]	Refund				

Reg. No. 35,487

Tel. No. (617) 523-3400

Customer No.: 21,874

William J. Daley, Jr.

Dike, Bronstein, Roberts & Cushman, LLP Intellectual Property Practice Group **EDWARDS & ANGELL, LLP** 130 Water Street

Boston, MA 02109

1.	] .	Incorpora	tion by	reference	of ac	dded	pages

(check the following item if the application in this transmittal claims the benefit of prior U.S. application(s) (including an international application entering the U.S. stage as a continuation, divisional or C-I-P application) and complete and attach the ADDED PAGES FOR NEW APPLICATION TRANSMITTAL WHERE BENEFIT OF PRIOR U.S. APPLICATION(S) CLAIMED)

[]	Plus Added Pages for New Application Transmittal Where Benefit of Prior U.S. Application(s) Claimed							
	Number of pages added							
[]	Plus Added Pages for Papers Referred to in Item 4 Above							
	Number of pages added							
[]	Plus added pages deleting names of inventor(s) named on prior application(s) who is/are no							
	longer inventor(s) of the subject matter claimed in this application.							
	Number of pages added							
[]	Plus "Assignment Cover Letter Accompanying New Application"							
	Number of pages added							

## [X] Statement Where No Further Pages Added

(if no further pages form a part of this Transmittal, then end this Transmittal with this page and check the following item)

[X] This transmittal ends with this page.

CERTIFICATE OF N	MAIL" (37 CFR 1.4.)	Docket No. 55,045 (158)							
Applicant(s): Brian Jame									
Serial No.	Filing Date	Examiner	Group Art Unit						
Not Yet Assigned	Herewith	Not Yet Assigned	Not Yet Assigned						
Invention: METHOD O	F REDUCING CONTENTION (	OF A HIGHLY CONTENDED LOC	K PROTECTING						
MULTIPLE	DATA ITEMS		<u>و</u>						
	•								
			S. J. S.						
			036						
		<b>3</b>	8						
I hereby certify that this	new U.S. utility patent applica								
		(Identify type of correspondence)							
<b>—</b>	elope addressed to: The Assista	ce "Express Mail Post Office to Add nt Commissioner for Patents, Wash							
(Date)	· ·								
		William J. Daley, Jr.  (Typed or Printed Name of Person Mailing Correspondence)							
		William 1 20	0						
E		(Signature of Person Mailing Corre	pondence)						
0 N		EL180585765US							
		("Express Mail" Mailing Label !	Vumber)						
<u>.</u> 									
	Note: Each paper must have its own certificate of mailing.								
			•						